

PerFix™ *Automated Optical Repair (AOR)*



PerFix™ AOR with Universal Access

PerFix™, Orbotech's revolutionary Automated Optical Repair solution for shorts and excess copper, is now equipped with Universal Access. This new set of tools enables fast and easy connectivity to many inspection stages operating as a repair center for much greater scrap saving opportunities.

Scrapped Panel Cost Savings

In high density applications, the manual repair of shorts often damages PCBs. With the precise, unparalleled repair capabilities of PerFix, you can save costs and achieve higher repair success rate of fine line products that cannot be manually repaired.

- Precise repair - Complete short repair of all defects without damaging adjacent conductors
- Fast and easy connectivity - Smooth integration with inspection process in the PCB production line
- Repeatable, high-quality repair - No more compromising on repair quality



Short before Repair



Manual repair



PerFix Repair
(no damage to lines)



Closed Loop Repair Technology™

Orbotech's unique, CLR Technology uses an automatic closed-loop of iterative processes image acquisition, image processing and laser ablation. Together, they provide repair results not possible with any other solution available on the market.

Image Acquisition

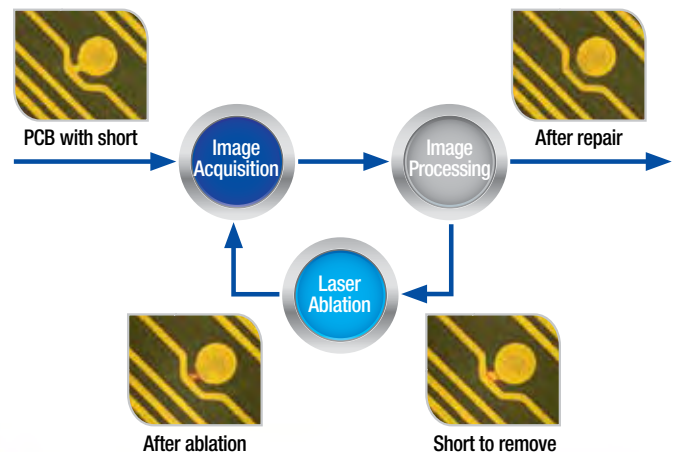
Superior image acquisition capturing accurate images of the inspected defect

Image Processing

Orbotech's field-proven SIP Technology™ to find the actual area of copper to be removed

Laser Ablation

Employing superior laser control, PerFix finds the optimal working point for high accuracy and minimal penetration

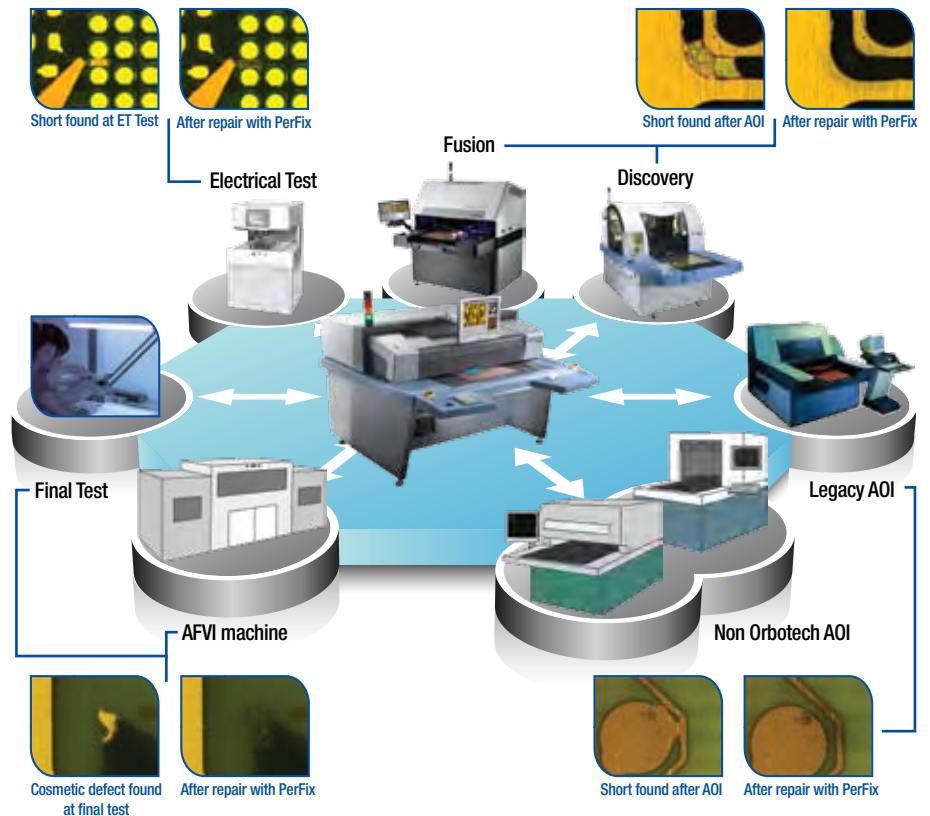


The Way to Repair More

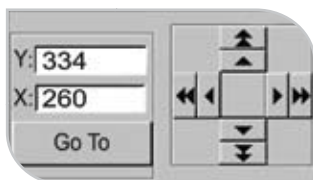
Universal Access Capabilities

PerFix with Universal Access delivers enhanced capabilities and increased flexibility to repair many more defects than ever before. It is now possible to automatically repair shorts and excess copper defects identified by a wide range of inspection and testing systems along the PCB production floor, including Orbotech and non-Orbotech inspection solutions.

PerFix with Universal Access operates as a repair center offering a much shorter repair cycle time than was previously possible. New features speed up connectivity and simplify navigation to defects from any production stage.



Using the mouse or keyboard arrows, a laser pointer is guided in seconds to locate and point to the defect's mark



Within seconds, defects can be accessed by typing the defect coordinates

Universal Access Benefits

- **Multiple number of short defects repair**
 - Easy navigation and location setup for any marked (pen or arrow) defect identified by any Orbotech AOI or other non-Orbotech inspection or testing process
 - Fast access within seconds using defect coordinates or connection to VeriSmart defect files
- **High repair capacity**
 - Much shorter time from panel loading to repair start
 - Shorter repair cycle time (50-75% shorter) for small and medium size defects
- **Enhanced AOI room efficiency**
 - Full flexibility to inspect a job on any AOI and then repair detected shorts on PerFix with Universal Access